Coast Guard, DOT § 160.035–2

- (c) At the time that the tests are successfully completed, the manufacturer shall present to the inspector four corrected copies of the plans noted in paragraph (a) of this section, including any corrections, changes, or additions which may have been found necessary during construction or testing. If the manufacturer desires more than one set of approved plans, additional copies shall be submitted at that time.
- (d) Upon receipt of corrected drawings and satisfactory test report, the Commandant will issue a certificate of approval. No change shall be made in the design or construction without first receiving permission of the Commandant via the Commander of the Coast Guard District in which the mechanical disengaging apparatus is built.

[CGFR 49-18, 14 FR 5113, Aug. 17, 1949]

Subpart 160.035—Lifeboats for Merchant Vessels

SOURCE: CGFR 65-9, 30 FR 11467, Sept. 8, 1965, unless otherwise noted.

§160.035-1 Applicable specifications.

- (a) *Specifications.* The following specifications, of the issue in effect on the date lifeboats are manufactured form a part of this subpart.
 - (1) A.S.T.M. standards:
- A 525—Specification for Delivery of Zinc-Coated (Galvanized) Iron or Steel Sheets, Coils, and Cut Lengths Coated by Hot Dip Method.
- A 36—Specification for Structural Steel
 - (2) Military specifications:
- MIL-P-18066—Plywood, Ship and Boat Construction.
- MIL-Y-1140—Yarn, Cord, Sleeving, Cloth and Tape—Glass.

 MIL-M-15817—Mats, Fibrous Class, For Roy
- MIL-M-15617—Mats, Fibrous Glass, For Reinforcing Plastics.
- MIL-R-7575—Resin, Polyester, Low-Pressure Laminating.
- MIL-P-40619—Plastic Material, Cellular Polystyrene.
- MIL-P-17549—Plastic Laminates, Fibrous Glass Reinforced, Marine Structural.
- MIL-P-19644—Plastic Foam, Molded Polystyrene (Expanded Bead Type).
- MIL-C-19663—Cloth, Glass, Woven Roving For Plastic Laminate.
- MIL-R-21607—Resins, Polyester, Low Pressure Laminating, Fire Retardant.

- MIL-P-21929—Plastic Material, Cellular Polyurethane, Rigid, Foam-In-Place, Low Density.
- (3) Federal specifications:
- TT-P-59—Paint, Ready-Mixed, International Orange.
 - (4) Federal test method standard:
- 406—Plastics: Method of Testing.
- (5) Federal Communications Commission:
- 47 CFR part 83, Rules Governing Stations on Shipboard in the Maritime Service.
 - (6) Coast Guard specifications:
- 160.033—Mechanical Disengaging Apparatus (For Lifeboats).
- 160.034—Hand Propelling Gear (For Life boats).
- 161.006—Searchlights, Motor Lifeboat.
- (b) Copies on file. Copies of the specifications and rules referred to in this section shall be kept on file by the manufacturer, together with the approved plans and certificate of approval. The Coast Guard Specifications may be obtained upon request from the Commandant. United States Coast Guard Headquarters, Washington, DC 20226. The A.S.T.M. Standards may be purchased from the American Society for Testing Materials, 1916 Race Street, Philadelphia, Pa. 19103. The Military Specifications may be obtained from the Commanding Officer, Naval Supply Depot, 5801 Tabor Avenue, Philadelphia, Pa. 19120. The Federal Communications Commission's Rules and Regulations may be obtained from the Fed-Communications Commission, Washington, DC 20554. Federal Specifications and Standards may be obtained from the General Services Administration, Business Service Center, Washington, DC 20407.

[CGFR 65-9, 30 FR 11467, Sept. 8, 1965, as amended by CGD 72-133R, 37 FR 17039, Aug. 24, 1972]

§160.035-2 General requirements for lifeboats.

- (a) The requirements of this subpart apply to all new construction. Lifeboats approved and in use prior to the regulations in this subpart may be continued in service if in satisfactory condition.
- (b) All lifeboats must be properly constructed and shall be of such form and proportions that they shall be

§ 160.035-3

readily maneuverable, have ample stability in a seaway, and sufficient freeboard when fully loaded with their full complement of persons and equipment. All lifeboats shall be capable of maintaining positive stability when open to the sea and loaded with their full complement of persons and equipment. All lifeboats must be open boats with rigid sides having internal buoyancy only. Lifeboats with a rigid shelter may be approved, provided that it may be readily opened from both inside and outside, and does not impede rapid embarkation and disembarkation or the launching and handling of the lifeboat.

- (c) Lifeboats may be constructed of steel, aluminum, fibrous glass reinforced plastic (FRP), or other materials receiving specific approval: *Provided*, That, the weight of the fully equipped and loaded lifeboat shall not exceed 44,800 pounds, and the carrying capacity calculated in accordance with § 160.035-9 of this specification shall not exceed 150 persons.
- (1) The thwarts, side benches and footings of lifeboats shall be painted or otherwise colored international orange in accordance with Federal Specification TT-P-59. The area in way of the red mechanical disengaging gear control lever, from the keel to the side bench, shall be painted or otherwise colored white, to provide a contrasting background for the lever. This band of white should be approximately 12 inches wide depending on the internal arrangements of the lifeboat.
- (d) For the purpose of calculations and conducting tests, the weight of the persons shall be taken at 165 pounds each.

[CGFR 65-9, 30 FR 11467, Sept. 8, 1965, as amended by CGD 95-028, 62 FR 51211, Sept. 30, 1997]

§160.035-3 Construction of steel oarpropelled lifeboats.

(a) Type. Lifeboats shall have rigid sides and be fitted with internal buoyancy so arranged that the boats will float in the flooded condition when fully loaded with persons and equipment. The capacity of an oar-propelled lifeboat is limited to a maximum of 59 persons. Lifeboats designed to carry 60, but not more than 100, persons shall be

either hand-propelled or motor-propelled. Lifeboats designed to carry more than 100 persons shall be motor-propelled, except that a lifeboat designed to carry more than 100 persons may be hand-propelled if it is a replacement for a previously approved hand-propelled lifeboat.

(b) Materials. (1) Plating for shell, floors, air tanks, etc., shall be made by the open-hearth or electric furnace process in accordance with ASTM Standards A-525 Class 1.25 Commercial. The bend tests required by these specifications shall be made after the galvanizing or other anticorrosive treat-

ment has been applied.

(2) Rivets and rolled or extruded shapes such as keel, stem, sternpost, gunwales, etc., shall be made by the open-hearth or electric furnace process in accordance with ASTM Standard Specification A-36. Consideration will be given to the use of other steels having equivalent strength where longitudinal cold forming is necessary.

(c) Riveting. (1) Riveting of the shell plating to the keel, stem, and sternpost shall be button head rivets, staggered with not less than 12 rivets to the foot. The distance from the edge of the plate to the centers of the rivets in the nearest row shall be not less than 1/2 inch nor more than ¾ inch. Rivets connecting the shell to the gunwale shall be spaced not more than 3 inches on centers. The size of the rivets for connecting the shell plating to the keel, stem, sternpost, and gunwale shall be 1/4-inch diameter for boats 28 feet and under and 5/16-inch diameter for boats over 28 feet.

- (2) The connection of the floors to the shell shall be a single row of rivets not less than 3/16 inch in diameter and spaced not more than 3 inches on centers.
- (d) Welding. Welding may be substituted for riveting in any location. It shall be performed by welders qualified by the U.S. Coast Guard, American Bureau of Shipping, or U.S. Navy Department, and only approved electrodes shall be used. Details of the joints shall be indicated on the construction drawings submitted for approval.
- (e) Gunwale braces. (1) The gunwale braces shall be bolted to the thwarts with at least two carriage bolts of a